

REMARKS

Applicants request favorable reconsideration of this application in view of the following remarks.

The specification has been amended editorially.

Applicants note that the Office Action does not address claims 36-43, which were added in the Preliminary Amendment filed on March 10, 2005.

Claim 25 has been rejected under 35 U.S.C. 112, second paragraph for insufficient antecedent basis. Applicants respectfully traverse this rejection.

Claim 25 was amended in the March 10, 2005 Preliminary Amendment to include a sufficient antecedent basis for the transmittance adjusting layer, i.e., "...the information recording medium according to claim 22, wherein the information layer further includes a transmittance adjusting layer and the transmittance adjusting layer contains at least one selected from ..." Therefore, the rejection should be withdrawn.

Claims 1-3, 5, 12, 13, 15, 32, 33, and 35 have been rejected under 35 U.S.C. 102 (e) as being anticipated by Hanaoka et al. (US Application Publication No. 2002/0,160,306). Applicants respectfully traverse this rejection.

Claim 1 requires that the recording layer include Ge, Sb, and Te, the contents of which satisfy the composition formula, $\text{Ge}_a(\text{Sb})_b\text{Te}_{3+a}$, wherein a and b in the composition shall be $2 \leq a \leq 50$ and $2 \leq b \leq 4$. Nothing in Hanaoka discloses such a recording layer. The reference in fact is directed to a recording layer that includes a much higher content of Sb and Te (see Tables 1 and 3). Therefore, the anticipation rejection is incorrect for this reason alone.

Regarding the crystalline nucleation layer, Hanaoka does not disclose or suggest the crystalline nucleation layer of claim 1. In addition, Hanaoka does not disclose the presence of the particular combination of Bi and M1 ("BiM1") and/or Te and M1 ("TeM1") that claim 1 requires. Hanaoka, instead, merely lists a wide range of elements

in Groups IV, IB, III, or N as the record stabilization materials in the crystallization acceleration layer (see para. 99) and a wide range of elements in Groups V and IV as the crystallization acceleration materials (see para. 100) and impurities (see para. 103) in the crystallization acceleration layer. None of the elements indicated as preferred by the reference for record stabilization materials or crystallization acceleration materials matches any M1 element of claim 1 (see para. 99 and 100), and the reference does not direct one to the particular combinations of claim 1 that obtain the excellent results. The combination of materials required for the crystalline nucleation layer of claim 1 provides melting point high enough to avoid impurity of the crystalline nucleation layer from being mixed into the recording layer even after repeated rewriting of information signals (see page 50, lines 33-37; and page 51, lines 4-11). The reference, however, in no way considers the selection of materials that have such advantages. As shown in Table 6 on page 81 of the present specification, the combinations of BiM1 and TeM1 required in claim 1 show excellent archival characteristics and the archival overwrite characteristics in contrast to SnTe. Note that Sn is one of Group IV elements that the reference discloses as useful (see para. 99). Therefore, the reference fails to disclose or suggest the crystalline nucleation layer of claim 1.

Claim 2 also requires the crystalline nucleation layer as discussed above and is distinguished from the reference for at least the same reason.

Claim 32 also requires the crystalline nucleation layer as discussed above and is distinguished from the reference for at least the same reason.

Therefore, the rejection of claims 1-3, 5, 12, 13, 15, 32, 33, and 35 should be withdrawn.

Claims 4 and 34 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Hanaoka et al. (US Application Publication No. 2002/0,160,306). Applicants respectfully traverse this rejection.

Claims 4 and 34 are allowable for at least the same reason as discussed above for claims 1 and 32. Therefore, the rejection of claims 4 and 34 should be withdrawn.

Claims 6-10 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Hanaoka et al. (US Application Publication No. 2002/0,160,306) in view of Morimoto et al. (US Patent No. 5,221,588). Applicants respectfully traverse this rejection.

Morimoto does not remedy the deficiencies of Hanaoka. Accordingly, the rejection of claims 6-10 should be withdrawn for at least same reason as discussed above for claim 1. Applicants do not concede the correctness of the rejection.

Claims 14, 17, 20-22, and 25-26 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Hanaoka et al. (US Application Publication No. 2002/0,160,306) in view of Nishihara et al. (US Patent No. 6,670,014). Applicants respectfully traverse this rejection.

Nishihara does not remedy the deficiencies of Hanaoka. Accordingly, the rejection of claims 14, 17, 20-22, and 25-26 should be withdrawn for at least same reason as discussed above for claim 1. Applicants do not concede the correctness of the rejection.

Claim 16 has been rejected under 35 U.S.C. 103 (a) as being unpatentable over Hanaoka et al. (US Application Publication No. 2002/0,160,306) in view of Kitaura et al. (US Patent No. 6,432,502). Applicants respectfully traverse this rejection.

Kitaura does not remedy the deficiencies of Hanaoka. Therefore, the rejection of claim 16 should be withdrawn for at least same reason as discussed above for claim 1. Applicants do not concede the correctness of the rejection.

Claims 27-31 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Hanaoka et al. (US Application Publication No. 2002/0,160,306) in view of Nishihara et al. (US Patent No. 6,670,014), further in view of Hirotsune et al. (US Patent No. 6,723,411). Applicants respectfully traverse this rejection.

Hirotsune does not remedy the deficiencies of Hanaoka and Nishihara. Therefore, the rejection of claims 27-31 should be withdrawn for at least same reason as discussed above for claim 1. Applicants do not concede the correctness of the rejection.

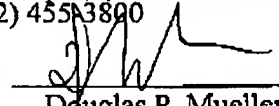
In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.



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Respectfully submitted,

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